

REMARKS

The above amendment and following remarks are responsive to the points raised in the October 21, 2004 final Office Action. Upon entry of the above amendments, Claims 1, 16, and 17 will have been amended, new Claims 19 and 20 will have been entered, and Claims 1-20 will be pending. No new matter has been introduced. No new issues have been raised that require further consideration or search. Reconsideration is respectfully requested.

Response to the Objection of the Specification

The specification has been objected to on the basis that the title is not descriptive. A new title “that is clearly indicative of the invention to which the claims are directed” has been required.

Applicant has amended the title of the invention in accordance with the title suggested by the Examiner. As such, Applicant respectfully submits that the above amendment to the title obviates the Examiner’s objection. Accordingly, the objection is now moot and should be withdrawn.

Applicant hereby thanks the Examiner for the suggested new title.

Response to the Rejection under 35 U.S.C. § 103(a)

Claims 1-18 have been rejected under 35 U.S.C. § 103(a) as being obvious over US Patent 5,557,358 to Mukai et al. (Mukai) in view of US Patent 5,049,997 to Aria. Applicant respectfully traverses this rejection. Applicant has, nonetheless, amended Claims 1, 16, and 17 to more clearly define the subject matter recited therein.

Amendment and Request for Reconsideration (37 CFR § 1.116)

The Examiner has admitted that the primary reference of Mukai does not teach each feature of the invention as recited in Claims 1-18. Specifically, the Examiner, in her comments rejecting independent Claim 1, states that:

“Mukai et al. fails to disclose that the correction device corrects the brightness of the viewfinder in accordance with a difference between a luminance level of the image signal obtained by the image sensing sensor, and a target luminance level which indicates an exposure value of a photographing operation.”

The Examiner, however, attempts to rely on the secondary teaching of Arai to remedy the admitted deficiencies of Mukai by stating that:

“Arai discloses in Fig. 3 an apparatus comprising a correction device that determines a difference between a luminance level of the image signal obtained by the image sensing sensor, and a target luminance level which indicates an exposure value of a photographing operation (col. 2, lines 40-56; col. 3, lines 10-15; col. 5, lines 34-44). It is implicit that the threshold value T indicates an exposure value of a photographing operation.”

From the above, the Examiner merely concludes that:

“[t]herefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of correcting brightness of the viewfinder as disclosed by Arai with Mukai et al. in order to provide an exposure control method and apparatus capable of a precise exposure control even if a main object is displaced more or less from the center of an image frame or even if the size of the main object is indefinite over consecutive scenes.”

Independent Claims 16 and 17, which are directed to a control method for controlling an image sensing apparatus and a computer program product that supplies a control program of an image sensing apparatus, respectively, are substantially equivalent to Claim 1. The Examiner's bases and comments for rejecting Claims 16 and 17 are substantially equivalent to those of Claim 1. As such, Applicant's comments and

arguments refuting the rejection of independent Claim 1 are likewise applicable to independent Claims 16 and 17.

Contrary to the Examiner's comments and conclusion of obviousness, Applicant respectfully submits that Mukai and Aria, alone or in combination, neither teach, suggest, nor render obvious the invention as recited in Applicant's Claims 1-18.

Mukai discloses a camera with an electronic viewfinder (EVF) having an angle of view that is wider than the angle of view of the taking lens. Such an arrangement, as disclosed by Mukai, displays an image scene by the EVF that includes objects and events outside the angle of view of the taking lens so that photographic composition of the taking lens can be more easily confirmed by the user. By way of an exposure value calculating routine, the camera taught by Mukai calculates exposure value from information obtained by the CCD and displays the full image in the EVF on the basis of the calculated exposure value. As referenced above, the Examiner points out that the camera, as disclosed by Mukai, does not correct the brightness of the viewfinder in accordance with a difference between a luminance level of the image signal obtained by the image sensing sensor, and a target luminance level. In the interest of clarity, Claims 1, 16, and 17 now recite that the correction device is adapted to correct brightness of the image signal displayed by the viewfinder, as opposed to being adapted to correct brightness of the viewfinder.

In the secondary reference of Arai, a luminance level, which is used for calculating a target luminance level, which indicates an exposure value of a photographing operation, is selected on the basis of a result of comparing a threshold value T and a difference between an average luminance value B_1 of a central area 36 of

an image frame 35 and an average luminance value B_2 of a peripheral area 37 of the image frame 35. Arai does not teach or suggest, however, calculating a difference between a luminance level of an image signal obtained by an image sensing sensor and a target luminance level which indicates an exposure value of a photographing operation. Arai neither teaches, suggests, or otherwise implies, “that the threshold value T indicates an exposure value of a photographing operation”, as urged by the Examiner.

Arai, in Column 2, Lines 40-56, discloses that:

“On the other hand, if the average luminance value of the peripheral area is lower than that of the central area and if the luminance difference therebetween is equal to or larger than the predetermined value, then the scene is determined as a spot light scene, and the average luminance value of pixels having a luminance level larger than the median between the two average luminance values, is used as the scene luminance value.

According to another embodiment of this invention, the threshold values are set in accordance with the type of scene discriminated at the preceding photometry operation. Differences in average luminance values of respective areas are compared with the threshold values to discriminate a scene. In accordance with the discriminated scene, the scene luminance value is calculated for performing exposure adjustment.”

Here, Arai discloses the conditions necessary for a scene to be considered a spot light scene and the value used as the scene luminance value. Arai also discloses that differences in the average luminance values obtained in determining the type of scene, are compared with threshold values, set in accordance with the type of scene, and the scene luminance is calculated for performing exposure adjustment. However, nowhere does the secondary teaching of Arai teach, suggest, motivate, or otherwise render obvious to one of ordinary skill in the art at the time the invention was made, to modify the primary teaching of Mukai, as suggested by the Examiner, to arrive at the invention as recited in independent Claims 1, 16, and 17. Additionally, it is not seen where it is

implicit, within these, or any, words of Arai “that the threshold value T indicates an exposure value of a photographing operation. Arai does not teach, suggest, or imply that any threshold value T indicates the exposure value of a photographing operation.

Arai, in Column 3, Lines 10-15, discloses that:

“Further, the threshold value is selected in accordance with the scene discriminated at the preceding photometry operation, so that the exposure control will not fluctuate unnecessarily to thereby allow a stable and natural exposure control.”

Here, Arai discloses the condition in which the threshold value is selected to obviate unnecessary exposure control fluctuation for allowing stable and natural exposure control. However, nowhere here does the secondary teaching of Arai teach, suggest, motivate, or otherwise render obvious to one of ordinary skill in the art at the time the invention was made, to modify the primary teaching of Mukai, as suggested by the Examiner, to arrive at the invention as recited in independent Claims 1, 16, and 17. Additionally, it is not seen where it is implicit, within these, or any, words of Arai “that the threshold value T indicates an exposure value of a photographing operation. Arai does not teach, suggest, or imply that any threshold value T indicates the exposure value of a photographing operation.

Arai, in Column 5, Lines 34-44, discloses that:

“The calculation control unit 26 obtains the difference between the average luminance values B_1 and B_2 for the central and peripheral areas 36 and 37, respectively, and compares the luminance difference with the predetermined threshold value T. If $|B_1 - B_2| < T$, it means that the luminance distribution of the image frame is substantially flat over the whole area so that it is judged that the object is not a rear light scene nor a spot light scene. In this case, the main object is assumed to be present in the central area 36, and the average luminance value B_1 is used as the scene luminance value.”

Here, Arai discloses the condition in which the main object is assumed to be present in the central area 36, and that when such is the case the average luminance value B_1 is used as the scene luminance value. However, nowhere here does the secondary teaching of Arai teach, suggest, motivate, or otherwise render obvious to one of ordinary skill in the art at the time the invention was made, to modify the primary teaching of Mukai, as suggested by the Examiner, to arrive at the invention as recited in independent Claims 1, 16, and 17. Additionally, it is not seen where it is implicit, within these, or any, words of Arai “that the threshold value T indicates an exposure value of a photographing operation. Arai does not teach, suggest, or imply that any threshold value T indicates the exposure value of a photographing operation.

In view of the above, neither the primary reference of Mukai nor the secondary reference of Arai, either alone or in combination, either teach, suggest, or otherwise render obvious, to one of ordinary skill in the art, the invention as recited in independent Claims 1, 16, and 17. The Examiner has not pointed to any specific suggestion or motivation advanced by either Mukai or Arai to modify the primary teaching of Mukai in view of the secondary teaching of Arai with a reasonable expectation of success founded in the references and not Applicant’s own disclosure (see, for example, Sections 2142 - 2144.01 of the Manual of Patent Examining Procedure). As such, the invention as recited in independent Claims 1, 16, and 17 is distinguished over the primary teaching of Mukai in view of the secondary teaching of Arai. Dependent Claims 2-15 and 18 are likewise distinguished over the teachings of Mukai and Arai for at least the same reasons as their respective base claims, i.e., Claims 1 or 17. Furthermore, newly added dependent Claims 19 and 20 are distinguished over the teachings of Mukai and Arai for at least the same

Amendment and Request for Reconsideration (37 CFR § 1.116)

reasons as base Claim 1. Newly added dependent Claims 19 and 20 further define, respectively, (1) a relationship between the target luminance level and the luminance level of the image signal obtained by the image sensing sensor, and (2) the brightness correction of the image signal displayed by the view finder is performed independently of the exposure control.

According, the rejection under 35 U.S.C. § 103(a) over Mukai in view of Aria should be withdrawn and the rejected claims allowed

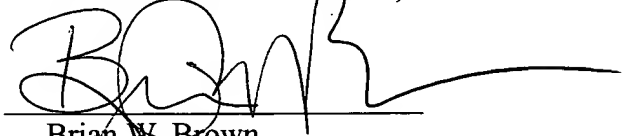
CONCLUSION

Applicant respectfully submits that Claims 1-12 are in condition for allowance and a notice to that effect is earnestly solicited.

AUTHORIZATIONS:

The Commissioner is hereby authorized to charge any additional fees which may be required for the timely consideration of this amendment, or credit any overpayment to Deposit Account No. 13-4500, Order No. 1232-4653.

Respectfully submitted,
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Amendment and Request for Reconsideration (37 CFR § 1.116)

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